In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-44 (Canceled)

45. (Currently Amended) A method of preparing a pharmaceutical composition or therapeutic vaccine, said method comprising the steps of:

(a) providing a plurality of hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells;

(b) treating said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells to increase the levels of primary or costimulatory molecules in said cells;

(c) providing a plurality of ~~a~~ bispecific monoclonal antibodies, each of said antibodies comprising a binding site for a CD28, 4-1BB or CTLA-4 molecule on the surface of T cells in a patient mammal and a binding site for a gp55, gp95~~, gp115~~ or gp210 antigen, said gp55 antigen binds to an antibody produced by the hybridoma cell line CCTCC-C200305, said gp95 antigen binds to an antibody produced by the hybridoma cell line CCTCC-C200306, and said gp210 antigen binds to an antibody produced by the hybridoma cell line CCTCC-C200307, respectively;

(d) attaching said bispecific monoclonal antibodies to said hepatocellular carcinoma, lymphoma, colon carcinoma or gastric cancer cells; and

(e) thereafter collecting a pharmaceutically effective amount of said hepatocellular carcinoma, lymphoma, colon carcinoma or gastric cancer cells with said bispecific monoclonal antibodies attached thereto; wherein said steps (c) and (d) are performed either before or after said step (b).

46. (Currently Amended) The method of claim 45, wherein ~~said one or more hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells comprise one or more hepatocellular carcinoma cells~~ a plurality of hepatocellular carcinoma cells are used.

47. (Currently Amended) The method of claim 45, wherein ~~said one or more hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells comprise one or more lymphoma cells~~ a plurality of lymphoma cells are used.

48. (Currently Amended) The method of claim 45, wherein ~~said one or more hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells comprise one or more colon carcinoma cells~~ a plurality of colon carcinoma cells are used.

49. (Currently Amended) The method of claim 45, wherein ~~said one or more hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells comprise one or more gastric cancer cells~~ a plurality of gastric cancer cells are used.

Claims 50-52 (Canceled)

53. (Previously Presented) The method of claim 45, wherein said patient mammal is a human.

Claims 54 and 55 (Withdrawn)

56. (Currently Amended) The method of claim 45, wherein the ~~one or more~~ hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells are treated with IFN-γ and TNF-α.

Claim 57 (Canceled)

58. (Currently Amended) The method of claim 45, wherein said antibodies comprise two or more antigen binding sites for the gp55, gp95, ~~gp115,~~ or gp210 antigens on the surface of said ~~one or more~~ hepatocellular carcinoma cells, lymphoma cells colon carcinoma cells or gastric cancer cells.

59. (Previously Presented) The method of claim 45, wherein said antibodies comprise two or more binding sites for said CD28, 4-1BB or CTLA-4 molecules on the surface of T cells in said patient mammal.

60. (Previously Presented) The method of claim 45, wherein said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells are treated with 10-100 U of IFN-γ and 10-100 U of TNF-α.

61. (Previously Presented) The method of claim 45, wherein said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells are treated with 100 U of IFN-γ and 50 U of TNF-α.

62. (Previously Presented) The method of claim 46, where said hepatocellular carcinoma cells are hepa 1-6 cells.

Claims 63 and 64 (Canceled)

Claim 65 (Withdrawn)

66. (Currently Amended) The method of claim 45, wherein ~~said one or more gp55, gp95, gp115, or gp210 antigens comprise gp95 antigens~~ the bispecific monoclonal antibodies bind to the gp95 antigen.

Claims 67 and 68 (Withdrawn)

69. (Currently Amended) The method of claim 45, wherein said collecting in step (e) comprises the step of removing said bispecific monoclonal antibodies not attached to said hepatocellular carcinoma, lymphoma, colon carcinoma or gastric cancer cells.

70. (Currently Amended) An immunogenic composition, comprising:

a pharmaceutically effective amount of one or more isolated autologous hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells which express one or more primary or costimulatory molecules at a level higher than in said cells in a patient mammal; and

a pharmaceutically effective amount of one or more bispecific monoclonal antibodies comprising a binding site for a CD28, 4-1BB or CTLA-4 molecule on the surface of T cells in a patient mammal, and a binding site for a gp55, gp95, ~~gp115,~~ or gp210 antigen, wherein said gp55 antigen binds to an antibody produced by the hybridoma cell line CCTCC-C200305, said gp95 antigen binds to an antibody produced by the hybridoma cell line CCTCC-C200306, and said gp210 antigen binds to an antibody produced by the hybridoma cell line CCTCC-C200307, respectively, wherein said bispecific monoclonal antibodies are attached to said hepatocellular carcinoma, lymphoma, colon carcinoma or gastric cancer cells, and wherein said composition is substantially free of bispecific monoclonal antibodies not attached to said hepatocellular carcinoma, lymphoma, colon carcinoma or gastric cancer cells.

71. (Previously Presented) The composition of claim 70, wherein said composition is isolated.

72. (Previously Presented) The composition of claim 70, wherein said composition is enriched.

73. (Previously Presented) The composition of claim 70, wherein said composition is purified.

74. (Currently Amended) The composition of claim 70, ~~wherein said one or more hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells comprise~~ which comprises one or more hepatocellular carcinoma cells.

Claims 75-77 (Withdrawn)

Claims 78-80 (Canceled)

81. (Previously Presented) The composition of claim 70, wherein said patient mammal is a human.

Claims 82 and 83 (Withdrawn)

84. (Previously Presented) The composition of claim 70, wherein the one or more hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells are treated with IFN-γ and TNF-α.

Claim 85 (Canceled)

86. (Previously Presented) The composition of claim 70, further comprising a pharmaceutically acceptable carrier or excipient.

87. (Currently Amended) The composition of claim 70, wherein said antibodies comprise two or more antigen binding sites for the gp55, gp95~~, gp115,~~ or gp210 antigens on the surface of said one or more hepatocellular carcinoma cells, colon carcinoma cells or gastric cancer cells.

88. (Previously Presented) The composition of claim 70, wherein said antibodies comprise two or more binding sites for said CD28, 4-1BB or CTLA-4 molecule on the surface of T cells in said patient mammal.

89. (Currently Amended) The composition of claim 70, wherein said composition comprises two or more antibodies comprising an antigen binding site for ~~a~~ the gp55, gp95~~,~~ ~~gp115,~~ or gp210 antigen on the surface of said one or more hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells.

90. (Previously Presented) The composition of claim 70, wherein said composition comprises two or more antibodies each comprising a binding site for a different one of said CD28, 4-1BB or CTLA-4 molecules.

91. (Previously Presented) The composition of claim 70, wherein said composition comprises two or more antibodies each attached to a different antigen.

92. (Previously Presented) The composition of claim 70, further comprising a pharmaceutically effective amount of IFN-γ, TNF-α, or both.

93. (Previously Presented) The composition of claim 70, wherein said hepatocellular carcinoma cells, lymphoma, colon carcinoma cells or gastric cancer cells are treated with 10-100 U of IFN-γ and 10-100 U of TNF-α.

94. (Previously Presented) The composition of claim 70, wherein said hepatocellular carcinoma cells, lymphoma, colon carcinoma cells or gastric cancer cells are treated with 100 U of IFN-γ and 50 U of TNF-α.

95. (Previously Presented) The composition of claim 74, where said hepatocellular carcinoma cells are hepa 1-6 cells.

Claims 96 and 97 (Canceled)

Claim 98 (Withdrawn)

99. (Currently Amended) The composition of claim 70, wherein ~~said gp55, gp95, gp115, or gp210 antigen comprises gp95 antigens~~ the bispecific monoclonal antibodies bind to the gp95 antigen.

Claims 100 and 101 (Withdrawn)

102. (Previously Presented) The composition of claim 70, wherein said one or more hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells express said CD28, 4-1BB or CTLA-4 molecule at a level 50% higher than the amount that said CD28, 4-1BB or CTLA-4 molecule is expressed from hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells in a patient mammal.

103. (Previously Presented) The composition of claim 70, wherein said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells expresses said CD28, 4-1BB or CTLA-4 molecule at a level 2 fold higher than the amount that said CD28, 4-1BB or CTLA-4 molecule is expressed hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells in a patient mammal.

104. (Previously Presented) The composition of claim 70, wherein said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells expresses said CD28, 4-1BB or CTLA-4 molecule at a level 10 fold higher than the amount that said CD28, 4-1BB or CTLA-4 molecule is expressed from hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells in a patient mammal.

105. (Previously Presented) The composition of claim 70, wherein substantially all of said antibodies are attached to said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells.

106. (Previously Presented) The composition of claim 70, wherein over 80% of said antibodies are attached to said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells.

107. (Previously Presented) The composition of claim 70, wherein over 90% of said antibodies are attached to said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells.

108. (Previously Presented) The composition of claim 70, wherein over 95% of said antibodies are attached to said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells.

109. (Previously Presented) The composition of claim 70, wherein the composition is substantially free of said antibodies that are not bound to said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells.

110. (Previously Presented) The composition of claim 70, wherein a pharmaceutically effective amount of said antibodies are bound to said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells.